

# **Exhibit AK**

## Longo Testimony

## Referenced Particle

**Mot. Ex. L, Longo (Valadez) Dep. at 55:17 – 56:14**

17 Q. So what is the structure to the right of the one  
18 that you've identified, the larger blocky structure with  
19 blue on the side? What is that it? Looks like it's mostly  
20 in perpendicular.

21 A. I just have to get oriented here, so give me a  
22 second.

23 MR. RIVAMONTE: Mr. Dubin, I just want to  
clarify.

24 The image that we're currently looking at now is page 32 of  
25 Dr. Longo's report, the parallel dispersion?

1 MR. DUBIN: On the right, yeah.

2 MR. RIVAMONTE: Okay. Yeah.

3 MR. DUBIN: I'm not sure if it has page numbers or  
4 we just counted pages.

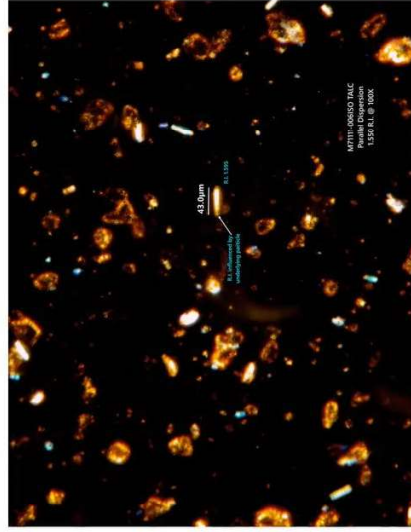
5 MR. RIVAMONTE: I'm just looking at the PDF,  
6 whatever the PDF says. It's page 32.

7 Q. (BY MR. DUBIN:) Sorry, Doctor, I wasn't sure if  
8 you were in the middle of --

9 A. Yeah, I heard it. I'm just looking at it. It's  
10 hard to say, what is that? What is that?

11 *I mean I'd have to be looking in the microscope at  
12 it to tell you what that is. It's not something we  
13 identified. So I don't know what's wrong with it, but I'd  
14 have to be looking in the PLM scope to make a guess.*

1.550 Vs. 1.560 RI



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Longo's 9/16/2020 Report on Project M71109-M71111 at 636 Longo Valadez Report at 33

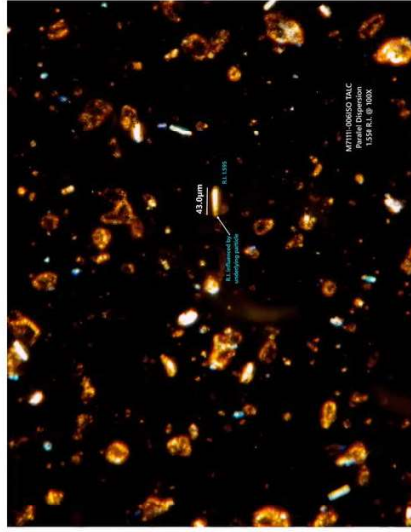
See Mot. Ex. X at 25.

Mot. Ex. L, Longo (Valadez) Dep. at 56:15-18

15 Q. Based on morphology, does that to appear to be a  
16 talc plate?

17 A. Again, I'd have to be looking in the microscope to  
18 make any decision on what that might be.

1.550 Vs. 1.560 RI



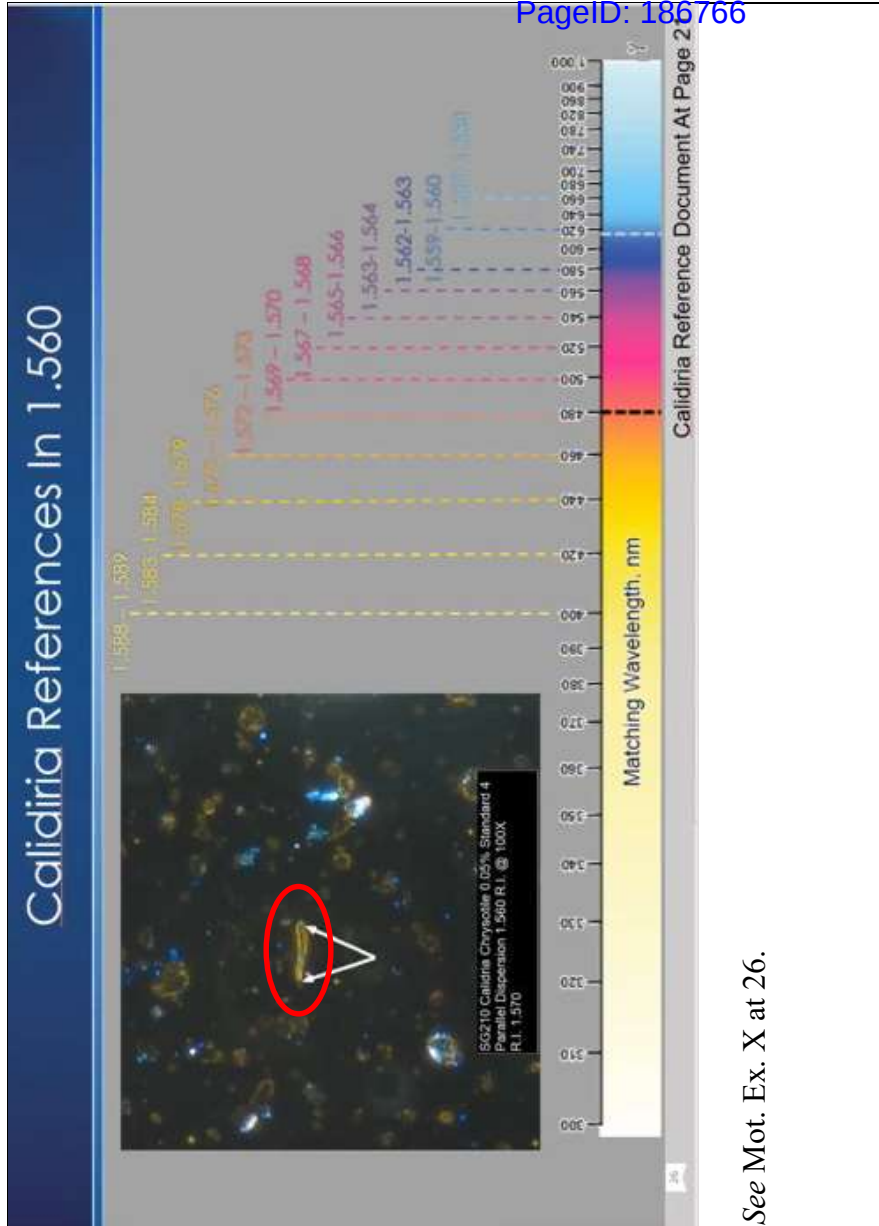
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Longo's 9/16/2020 Report on Project M71109-M71111 at 636 Longo Valadez Report at 33

See Mot. Ex. X at 25.

**Mot. Ex. L, Longo (Valadez) Dep. at 61:5-62:3**

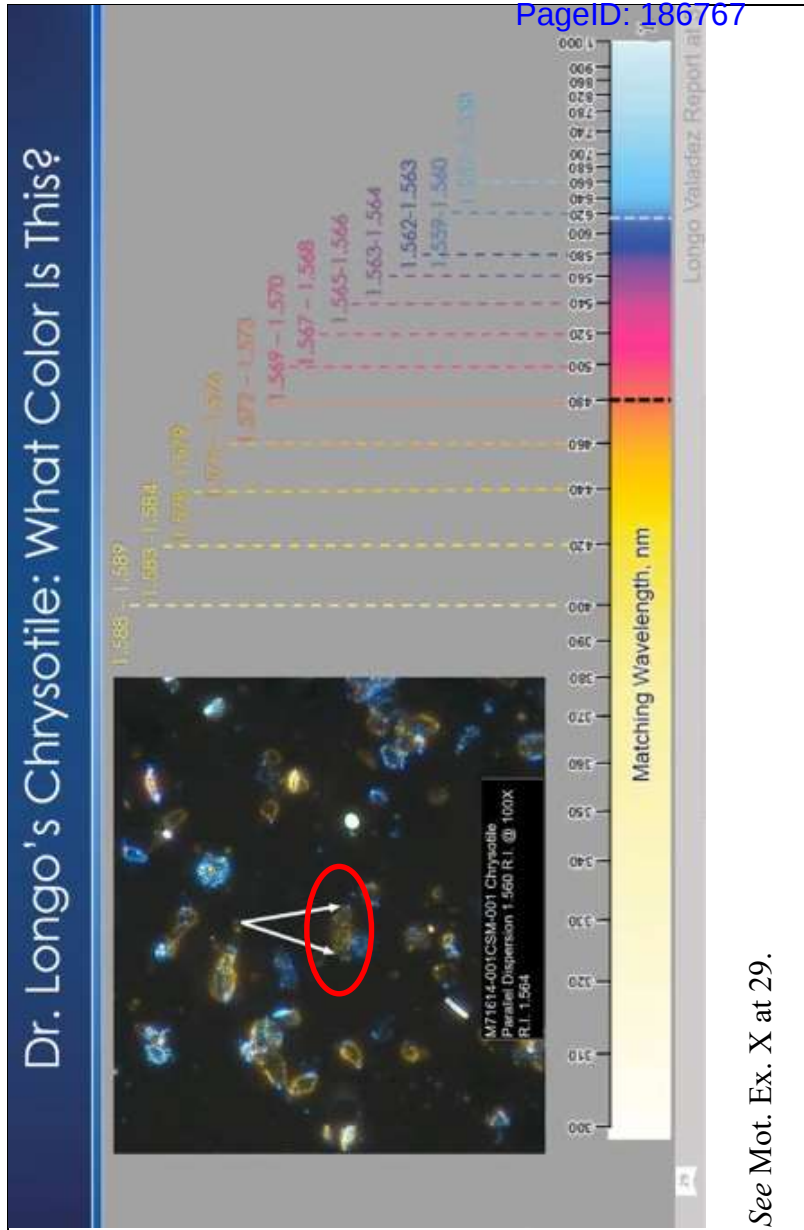
- 5 Q. Are you honestly telling me that when you look at  
 6 this image, that structure is that magenta color underneath  
 7 500?  
 8 A. Well, no.  
 9 MR. RIVAMONTE: Argumentative.  
 10 THE WITNESS: I'm not saying that. That magenta  
 11 color under 500 -- ours is more in the 1.572 -- you know, if  
 12 these are -- if he's correct. I got to go back to his  
 13 tables, and we're using the tables he has in his  
 14 publication. And I'd be looking at -- let me take look at  
 15 that.  
 16 Oh, I'm looking at the chrysotile. No wonder.  
 17 Need to be looking at the talc that we analyzed. Where is  
 18 that? You're looking at the standard. No wonder. There it  
 19 is.  
 20 No, we have sort of that at the 500 mark. *Again,*  
 21 *I'd have to be under the microscope to look at it*, but the  
 22 outer edge, I think that was averaged. But I think that's  
 23 what you're using is from one of his older Su tables maybe.  
 24 But I don't have a problem with -- the whole thing is not  
 25 looking this magenta -- redder-ish [sic] purple.  
 1 But on the outer edge, on the top of the structure  
 2 it has where the Becke line is. So I'm not concerned with  
 3 that.



See Mot. Ex. X at 26.

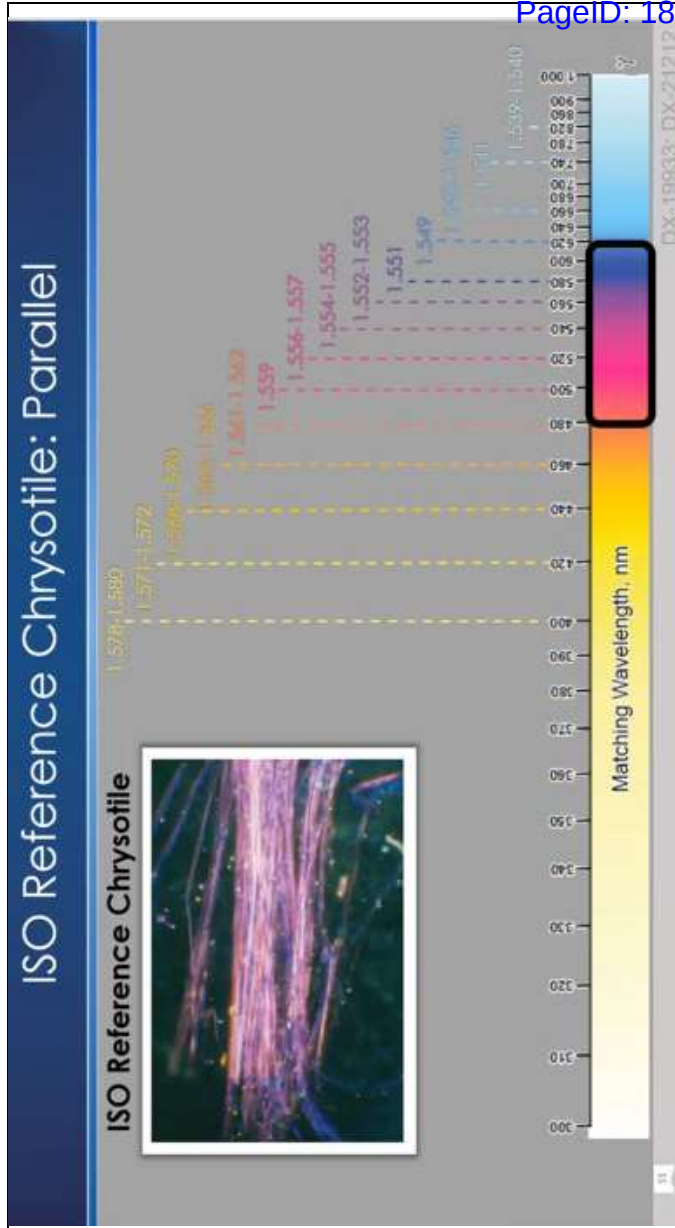
**Mot. Ex. L, Longo (Valadez) Dep. at 64:13-20**

- 13 Q. Uh-huh. Okay. So let's keep going. But you're  
 14 treating this -- for purposes of your birefringence  
 15 calculation, you're treating this -- the number that goes  
 16 into your calculation is associated with purple?  
 17 A. Now, that's what it looks like to me, sitting  
 18 here. ***Again, you know, I'd have to be sitting at the PLM***  
 19 ***scope***, but I can see a reddish-purple around the edge, what  
 20 I'm looking at right now.



**Mot. Ex. L, Longo (Valadez) Dep. at 67:2-17**

2 Q. I'm just talking about the color, the color  
 3 itself. Right? The color of this is -- you're saying  
 4 visually whatever oil it's in, that the structure we just  
 5 looked at from the Johnson & Johnson is further towards  
 6 purple than this. Right?  
 7 MR. RIVAMONTE: Asked and answered.  
 8 THE WITNESS: You can't compare the two.  
 9 And, yes, it's a darker reddish-purple than, you  
 10 know, this magenta color eliminating the bright yellow  
 11 colors and ignoring the size of structure under that, that  
 12 is probably closer -- is more closer to the size ranges  
 13 we're seeing.  
 14 So, yeah. You just can't compare the two. I told  
 15 you my opinion about it and what was around the edge, and  
 16 ***I'm not looking in a microscope.*** I can't answer it anymore  
 17 and help you out here.



See Mot. Ex. X at 31.



**Mot. Ex. L, Longo (Valadez) Dep. at 78:13-79:9**

13 Q. Just for reference, we're looking at  
14 M71614-001CSM-002.

15 So are there any images in here where we can  
16 determine the colors that we're seeing in the Becke line and  
17 translate those into wavelengths of light? Or do we not  
18 have images to be able to do that?

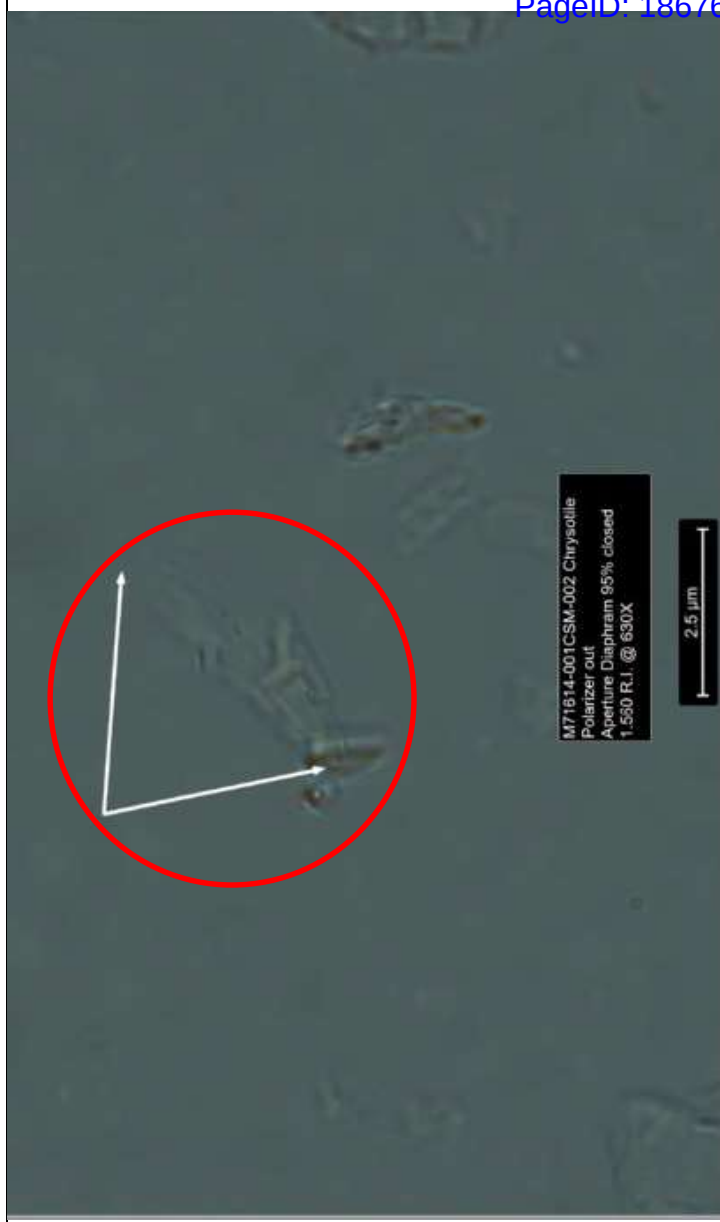
19 A. You know, maybe. You don't really have the image  
20 there. But the one that's parallel -- I don't know if you  
21 could really do that or not. We don't do Becke line work  
22 here, so it's not something I do all the time or would do.

23 I wouldn't use Becke lines to identify a  
24 particulate that's unknown. I would start off with SEM or  
25 something.

1 Q. Okay. So you wouldn't be able to tell me, for  
2 example, if this were a Becke line, what wavelength of light  
3 that -- what color -- what wavelength of light that's  
4 associated with?

5 A. No. In order for me to do that, I would have to  
6 be sitting at the microscope, in focus, out of focus, and  
7 look at that.

8 So, no, that's not something I can just do from  
9 looking at this picture. At least I can't.

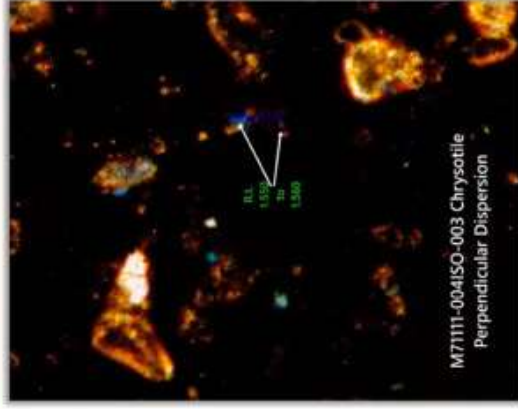
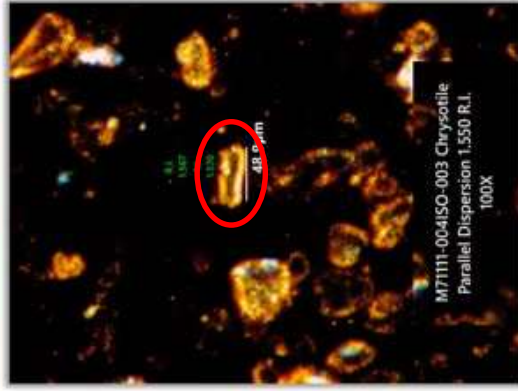


See Mot. Ex. K at 40.

**Mot. Ex. L, Longo (Valadez) Dep. at 39:17-40:14**

17 Q. Can you tell me what the refractive index of a  
18 talc plate is?  
19 MR. RIVAMONTE: Vague and overbroad.  
20 THE WITNESS: I would say the majority of them  
21 there, you know, are down in the 1. -- 1.5 -- maybe 1.55 --  
22 1.558 or something like that. *I don't know. I'd have to*  
23 *go -- I'd need to be looking in the microscope and look at*  
24 *the chart.*  
25 What I do know is platy talc is not fibrous, so  
1 it's not in the equation. And what I do know, if I look  
2 over in the alpha, we don't see any blues. And if I look at  
3 what is in perpendicular on that big structure up in the  
4 left-hand corner, where I say, this is a -- this is a  
5 talc -- talc plates on edge right there or this is fibrous  
6 talc, and that's now -- in the left-hand side, that's in the  
7 alpha direction, and you can't see such a blue on the end.  
8 It's real bright.  
9 And then on the right-hand side, now it's in the  
10 parallel direction and you still got the white. That's out  
11 of the range of all the refractive indices. I mean, you're  
12 looking at greater than 1.590.  
13 And on the other side, you're looking, less than  
14 1.535.

## Dr. Longo's "Chrysotile": White Balancing



Longo's 9/16/2020 Report on Project M71109-M71111 at 296-297

See Mot. Ex. X at 15.